Tennessee Responds to AIDS

AIDS/HIV Update

AN OVERVIEW OF HIV DISEASE IN TENNESSEE THROUGH 1999

The following report is an overview highlighting HIV and AIDS data collected through disease surveillance efforts and research studies through 1999. The report focuses on reported cases, estimates, and trends.

From 1982 through 1999, there were 8,180 Tennesseans with HIV disease that progressed to AIDS and have been reported. Of these persons, 4,269 are living with AIDS. Another 5,429 Tennesseans have been reported with HIV only (not AIDS) since HIV reporting began in 1992. HIV disease in Tennessee is diverse in its geography and demography. All 95 counties have reported at least one person with HIV disease. Comparisons of HIV only cases, which represent more recent infections, to AIDS cases, which represent persons infected further in the past, indicates increased disease among women, blacks, and persons at risk due to heterosexual intercourse or needle sharing related to injecting drug use.

Currently 784 Tennesseans are reported with their earliest HIV positive test date in 1999 and with no clinical indicators of AIDS at initial report. Of these, 784 persons, 233 (30%) are females, and 511 (65%) are black. While gender and race are not a risk for becoming HIV infected, they may be correlated to other factors which increase an individual's risk of infection. Of these 784 persons, 603 have an identified risk as follows: 319 (41%) are men having sex with men, 177 (23%) are heterosexual intercourse, 79 (10%) are needle sharing related to injecting drug use, 19 (3%) are men having sex with men and injecting drug use combined, 8 (1%) are infants born to HIV infected mothers, and 1 (<1%) is related to receiving blood products.

HIV continues to have significant impact among teens and young adults. Approximately 1 of each 5 Tennesseans reported with an HIV infection diagnosis in 1999 was between the ages of 13 and 25 at the time of their diagnosis. Of the 784 persons with an HIV infection diagnosis in 1999, 143 (18%) are in this age group. Persons testing HIV positive in their early 20s were possibly infected as teens.

Data collected for infants developing HIV/AIDS due to perinatal exposure (i.e., being born to an HIV infected mother) suggest a decline in the number of new cases being diagnosed. The Tennessee Department of Health participated in a Centers for Disease Control and Prevention sponsored research study to more fully determine the impact of HIV testing and treatment guidelines for pregnant women which were released in 1994. Results of this study indicate that from 1993 through 1997, 335 HIV infected women gave birth to 387 HIV sero-exposed infants. Earlier studies indicate that approximately 52 of these 387 sero-exposed infants may be expected to develop HIV infection. For birth years 1993 through 1997, 38 infants have been reported with HIV infection and/or an AIDS diagnosis through May 2000. Due to reporting delays, additional infants born during this period may be reported in the future. However, the numbers of perinatal exposed infants that have developed HIV/AIDS and that have been reported is declining. Numbers of infected infants, by year of birth, and reported through May 2000 are as follows: 1993=15, 1994=8, 1995=5, 1996=3, 1997=7, 1998=4, and 1999=3. For the five year period 1989 through 1993, the average number of births per year to HIV infected infants with perinatal exposure is 10.8 births per year for reporting through May 2000. For the five year period 1994 through 1998, this average has declined to 5.4 births per year based on reporting through May 2000. These declines are due to expanded voluntary HIV counseling and testing of all pregnant women and to advances in medical care, including use of anti-retrovirals, for HIV infected pregnant women and their perinatal exposed infants.

Prior to 1995, deaths due to AIDS were increasing substantially each year resulting in AIDS being a

cont. on page 2

leading cause of death for young adults. In 1995, deaths due to AIDS peaked in Tennessee at 529 deaths. From 1996 through 1998, numbers of deaths due to AIDS declined annually as follows: 1996=406, 1997=286, and 1998=225. These overall declines are due to 1) better HIV intervention programs which have overall slowed the growth of the epidemic and 2) to advances in medical treatments that slow the progression of HIV disease and prevent opportunistic infections. The use of protease inhibitor drugs and combination anti-retro viral therapies particularly hold promise to advance the clinical management of HIV disease. Provisional mortality data for 1999 indicates 254 deaths due to AIDS which is a 13% increase in AIDS related deaths over 1998.

From 1982 through 1993, there was a rapid growth in new AIDS cases diagnosed each year. This growth reached a peak in 1993, due to the expansion of the AIDS case definition to include HIV infected persons with a low CD4 count. During 1994, there was a stabilization in reporting of new AIDS cases leading up to the current period of more level incidence since 1995. Adjusting for reporting delay (i.e., diagnosed cases that have not been reported are estimated based on past patterns of late reporting), based on reporting through May 2000, the annual number of newly diagnosed AIDS cases since 1995 is as follows: 1995=942, 1996=905, 1997=793, and 1998=854. Because adjusting for reporting delays becomes less accurate for more recently diagnosed cases, estimates for 1999 are incomplete. However provisional data for 1999 suggests continuation of the trend of more level incidence. Another important change is the incidence of severe clinical AIDS, as reflected in the diagnosis and reporting of opportunistic infections, has declined since the beginning of 1995. The number of persons diagnosed each year with an AIDS opportunistic infection since 1995 and reported through May 2000 is as follows: 1995=499, 1996=346, 1997=286, and 1998=236. As discussed above, these changes are due to better intervention programs and to better medical treatment for persons with HIV disease.

Recent estimates of HIV prevalence indicate 10,000 to 12,000 Tennesseans living with HIV through 1999. These figures include all persons currently infected with HIV and those living with AIDS. A “best guess” for new HIV infections occurring each year (i.e., incidence) in Tennessee continues to be approximately 1,000. With stable HIV incidence, and with persons with HIV disease living healthier and longer, gradual increases in HIV prevalence are likely over the next few years.

In summary, improved HIV intervention programs and medical treatments for persons with HIV disease continue to support overall beneficial changes resulting in positive trends including: 1) decreases in new diagnosis of opportunistic infections, 2) decreases in AIDS related deaths, 3) decreases in infants developing HIV infection as a result of being born to an HIV infected mother, and 4) a leveling of AIDS incidence (i.e., new cases of AIDS diagnosed each year). While numbers of cases for some categories have increased during 1999 when compared to 1998 figures, this appears attributable to short term statistical fluctuation rather than a change in trend.

While there have been genuine advances, particularly in the clinical management of HIV disease, it is essential to remember that HIV continues to be a serious health threat for all persons engaging in risk behaviors regardless of their gender, race, age, or sexual orientation. There are no indicators of a decline in new HIV infections. With stable HIV incidence and continued improvements in medical care resulting in more persons with HIV disease living healthier and longer, overall HIV prevalence will increase. In a time of increasing disease prevalence and dramatic treatment advances which are costly, it remains more important than ever to continue the commitment to prevention, intervention, support, and medical services as an effective response to this epidemic.

This report and other HIV/AIDS information is available online at www.state.tn.us/health by going to Programs & Services and then to Communicable Diseases.

Source: Tennessee Department of Health, STD/HIV Program, HIV/AIDS Surveillance Section. For more information, please contact: Herb Stone, 615-532-8495 or hstone@mail.state.tn.us.